

COMMUNICATION AND NETWORKING RISER ECR FORM

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ECR# (assigned internally): #003

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Title of the Change: SVID/SID Persistence during power down states

Specification Title and Version: CNR Specification, Version 1.0

Reason for Change:

Clarification of the expected behavior of the Subsystem Vendor ID (SVID) and Subsystem ID (SID) stored in the PCI functions connected to CNR, during power down states, as specified by the PCI Local Bus Specification (as requested by Microsoft).

Description of Change:

Update Section 6.1 as shown by the (red) italicized text in the paragraph below.

6.1. Operating System Plug-and-Play Requirements

Operating systems have improved dramatically through the past several years in their ability to use standardized register space to uniquely identify hardware added to a system and to appropriately install the driver(s) intended for the newly installed hardware. To insure that the same level of automation and that ease-of-use is maintained, the CNR **must** implement a Plug-and-Play (PnP) type interface that is compatible with today's operating systems. PCI based devices implement a standard style of PnP, with registers defined for Vendor ID (VID), Device ID (DID), Subsystem Vendor ID (SVID), and Subsystem ID (SID). Normally, the VID and DID are hardwired within the PCI device for each function implemented. However, since the analog front end (AFE) of the various functions available on the CNR can be provided by different suppliers, with each implementing the surrounding support circuitry in a different fashion, the SVID and SID need to be assigned on a solution by solution basis. Since the CNR carries the AFE solution, and various different vendors can provide this AFE solution, the SVID and SID information to properly install the correct drivers **must** be provided by the CNR.

The CNR PnP information will be provided to the operating system using a combination of a SMBus based EEPROM and specialized BIOS routines. The electrical interface to the EEPROM is provided on the CNR connector through the signals SMB_SCL, SMB_SDA, SMB_A2, SMB_A1, and SMB_A0. The following sections provide the required information for selecting, addressing, and programming the contents of the CNR Plug-and-Play EEPROM (PnP EEPROM).

As part of the PnP functionality of CNR, all PCI functions providing interfaces to the CNR must ensure that their SVID and SID registers remain unchanged across power transitions, as required by the PCI Local Bus Specification, Revision 2.2.